The Role of Archives in the Graphic Restitution of Monuments: The Case of the Roman Bridge over the Ofanto River near Canosa di Puglia, Italy

El papel de los archivos en la restitución gráfica de monumentos: el caso del puente romano sobre el río Ofanto cerca de Canosa di Puglia, Italia

Abstract

The current structure of the Roman bridge over the Ofanto River near Canosa di Puglia (southern Italy) is the result of numerous reconstruction and restoration efforts that transformed its appearance several times over the centuries.

The documents preserved in the archives have proved to be an essential tool for the graphic restitution of the monument, integrating archaeological research with new data and outlining new perspectives on the history of architecture and multidisciplinary fields.

Keywords: bridge, Roman architecture, Canosa, archives, graphic restitution, ancient architecture

Resumen

La estructura actual del puente romano sobre el río Ofanto cerca de Canosa di Puglia, en el sur de Italia, es el resultado de numerosas reconstrucciones y trabajos de restauración que transformaron su apariencia varias veces a lo largo de los siglos.

Los documentos preservados en algunos archivos han sido un recurso esencial para la restitución gráfica del monumento, integrando investigación arqueológica con nuevos datos y perfilando nuevas perspectivas sobre la historia de la arquitectura y los campos multidisciplinares.

Palabras clave: puente, arquitectura romana, Canosa, archivos, restitución gráfica, arquitectura antigua

The word “monument” derives from a Latin verb that literally means “to remind,” “that carries memory with it,” implicitly conveying the idea of being preserved and therefore handed down to future generations.

The beginning of human history coincides precisely with the moment when writing was able to leave behind the testimony of a gesture, an action, a meaning. What the text represents for the word, the drawing represents for the image. The archives are the place where these precious documents are kept, a sort of cerebral cortex of society. It is from them that a posteriori investigation can proceed to find those memories that have been lost or destroyed, thus reconstructing them.

This procedure has been applied in the research into the original appearance of a Roman bridge over the Ofanto River, near the city of Canosa di Puglia in southern Italy, which had been altered and restored several times over the centuries.

The bridge, 170 m long and 4.5 m wide, currently consists of four piers of different sizes, ranging from a minimum of 6.2 m to a maximum of 8.4 m. These are composed of square blocks built in opus isodomum and equipped with triangular starlings and pyramidal cones upstream and downstream. Five arches of different widths (from east to west: 6.5 m, 13 m, 12.1 m, 12.1 m, 13 m) and morphologies – i.e., segmental and rounded arches – are grafted onto them, defining a humped profile.

Of great interest is the presence of a platea, a foundation slab paved with trapezoidal limestone flagstones, whose layout reveals traces of restoration work done in ancient times.1

Only the pillars, the abutments and the foundation slab remain of the original structure of the bridge.

Due to the precarious condition of the structure after the last war, especially from a static point of view, vehicular traffic was transferred a short distance downstream to a newly-built bridge on State Route 98.
In Roman times, these interventions were documented through inscriptions that attest to repairs under Septimius Severus and Caracalla, as well as to the main crossing over one of the major rivers of the Tavoliere della Puglia, and due to several earthquakes and the work of the river's flow over time, which have compromised the structure, the bridge has been subjected to numerous restoration and reconstruction efforts in particular during the Middle Ages, under the Kingdom of Naples with interventions by Vanvitelli, and after World War II. In Roman times, these interventions were documented through inscriptions that attest to repairs under Septimius Severus and Caracalla, as well as to the main crossing over one of the major rivers of the Tavoliere della Puglia, and due to several earthquakes and the work of the river's flow over time, which have compromised the structure, the bridge has been subjected to numerous restoration and reconstruction efforts in particular during the Middle Ages, under the Kingdom of Naples with interventions by Vanvitelli, and after World War II. In Roman times, these interventions were documented through inscriptions that attest to repairs under Septimius Severus and Caracalla, as well as to the main crossing over one of the major rivers of the Tavoliere della Puglia, and due to several earthquakes and the work of the river's flow over time, which have compromised the structure, the bridge has been subjected to numerous restoration and reconstruction efforts in particular during the Middle Ages, under the Kingdom of Naples with interventions by Vanvitelli, and after World War II. In Roman times, these interventions were documented through inscriptions that attest to repairs under Septimius Severus and Caracalla, as well as to the main crossing over one of the major rivers of the Tavoliere della Puglia, and due to several earthquakes and the work of the river's flow over time, which have compromised the structure, the bridge has been subjected to numerous restoration and reconstruction efforts in particular during the Middle Ages, under the Kingdom of Naples with interventions by Vanvitelli, and after World War II. In Roman times, these interventions were documented through inscriptions that attest to repairs under Septimius Severus and Caracalla, as well as to the main crossing over one of the major rivers of the Tavoliere della Puglia, and due to several earthquakes and the work of the river's flow over time, which have compromised the structure, the bridge has been subjected to numerous restoration and reconstruction efforts in particular during the Middle Ages, under the Kingdom of Naples with interventions by Vanvitelli, and after World War II. In Roman times, these interventions were documented through inscriptions that attest to repairs under Septimius Severus and Caracalla, as well as to the main crossing over one of the major rivers of the Tavoliere della Puglia, and due to several earthquakes and the work of the river's flow over time, which have compromised the structure, the bridge has been subjected to numerous restoration and reconstruction efforts in particular during the Middle Ages, under the Kingdom of Naples with interventions by Vanvitelli, and after World War II.
the central span with two arches resting on a central pillar, thus halving the width of the spans and decelerating the flow of the river, which they considered to be dangerous going into the future. This work also included the rectification of the river’s course and the restoration of the foundation slab, which began in 1755. This phase was documented by the “licensed surveyor” Francesco Paolo Pacileo, who was the first to record construction details, though he was still strongly influenced by the simplified style of the atlases.

In 1756, Colonel Amato Poulet was sent to prepare a project for the restoration of the foundation platea. He appended a detailed plan that constituted the oldest existing architectural survey of the bridge. His drawing is substantially comparable with current surveys, not only demonstrating the military engineer’s technical skill, but also highlighting those elements that are no longer visible today. Such is the case with the opening in the first span on the Canosa bank, a sort of drainage mechanism frequently found on the spandrel wall of ancient bridges to facilitate the flow of water and the discharge of weights. Even the shape of the arches and the angle of the upper parapets show divergences with the bridge’s current state, evidence of the huge changes that the structure underwent following the bombardment of the retreating Germans during World War II, whose sad legacy also includes the destruction of the lateral retaining walls (built to limit the impact of floods and thus made ineffective) and the construction of a concrete walkway above the platea that has irreparably altered its integrity.

The antithesis of this destruction lies in nothing else but conservation, in which the archives are indispensable. A few maps, a sketch and an ancient survey may seem like nothing compared to volumes of written records and land registries, yet the power of the image lies precisely in the synthesis it provides compared to the word, its ability to restore the dignity of a lost memory of a giant of the past.

Archival preservation has always faced the challenges of time and wear, not to mention the uniqueness of some documents, which, if they go missing or are destroyed, can be lost forever. In this sense, technological and computer systems for archiving and cataloguing, which can be consulted from any corner of the world, remain fundamental for preserving and handing down even the very material vividness of the documentum, thus becoming itself a monumentum.

In a recent meeting with the professor Raffaella Cassano, the first archaeologist to study this bridge, whose 1985 study paid close attention to the platea, she affirmed the importance of the archive as an essential tool for understanding archaeological and architectural contexts, one that is sometimes even more crucial than the excavations themselves. It is also true that, despite its importance, the archive is often underestimated in the research process. It is therefore desirable that it be used not only as the starting point for research, but also as a central part of the verification and cross-referencing of data.
Notes


References


Graphic restitution of the Roman bridge, according to Germano Germanò (left) and its present appearance (right), Germano Germanò, 2020.